AMENDMENTS TO CLAIMS

In accordance with 37 C.F.R. § 1.121 please amend the pending claims of the same number according to the following annotated version of all claims.

1.   (Currently amended) A method of compressing data in a graphics processing system comprising:

defining a plurality of tiles of data;

defining a tile format table, separate from data storage of said tiles, containing a status entry for each of said plurality of tiles;

compressing each of said tiles, wherein each tile is compressed if it is determined that compression results in a smaller tile size;

setting said status entry for each of said tiles in said tile format table, wherein said status entry indicates the memory size of each of said tiles after compression, with a full size indicating a non-compressed tile;

storing said tiles in a memory; and

retrieving said tiles from said memory whereby said status entry indicating memory size is used to determine whether said tiles need to be decompressed at time of retrieval.

2.   (Original) The method of claim 1 wherein said compression is lossless.

3.   (Original) The method of claim 1 wherein each of said tiles comprises a cache line.

4.   (Previously presented) The method of claim 1 wherein tiles read from said memory are decompressed when said status entry indicates that said tile is a compressed tile.

5.   (Currently amended) A method of compressing color pixels in a graphics processor system comprising:

defining a plurality of tiles of data;

defining a tile format table, separate from data storage of said tiles, containing a status entry for each of said plurality of tiles;

compressing each of said tiles, wherein each tile is compressed if it is determined that compression results in a smaller tile size;

setting said status entry for each of said tiles in said tile format table, wherein said status entry indicates the memory size of each of said tiles after compression, with a full size indicating a non-compressed tile;

storing said tiles in a memory; and

retrieving said tiles from said memory whereby said status entry indicating memory size is used to determine whether said tiles need to be decompressed at time of retrieval.

6.   (Previously presented) The method of claim 5 wherein each of said tiles is compressed using one of a plurality of compression methods.

7.   (Previously presented) The method of claim 6 wherein each of said

includes a value identifying the compression method of said plurality of compression

methods used to compress said compressed tile.

8.   (Previously presented) The method of claim 6 wherein each of said tiles is

comprised of pixels having pixel color components.

9.   (Currently amended) ~~The method of claim 8~~ A method of compressing

color pixels in a graphics processor system comprising:

    defining a plurality of tiles of data;

    defining a tile format table containing a status entry for each of said plurality of

tiles;

    compressing each of said tiles, wherein each tile is compressed if it is determined

that compression results in a smaller tile size;

    setting said status entry for each of said tiles in said tile format table, wherein said

status entry indicates the memory size of each of said tiles after compression, with a full

size indicating a non-compressed tile;

    storing said tiles in a memory; and

    retrieving said tiles from said memory whereby said status entry indicating

memory size is used to determine whether said tiles need to be decompressed at time of

retrieval;

wherein each of said tiles is compressed using one of a plurality of compression methods;

wherein each of said tiles is comprised of pixels having pixel color components; and

wherein one of said compression methods comprises entropy encoded differences between adjacent pixel color components, in which unique color or component values in a tile are extracted and sorted by minimal difference, are entropy encoded, and are indexed per pixel in said tile.

10.   (Original) The method of claim 9 in which the assignment of entropy codes per tile is based on the frequency of occurrence of difference values within said tile.

11.   (Original) The method of claim 10 in which multiple component difference codes are combined into a single code per pixel.

12.   (canceled)

13.   (Previously presented) The method of claim 9 in which said unique colors and components are sorted in a manner that minimizes a size of pixel difference encoding and minimizes a size of color and component difference encoding.

14. (Previously presented) The method of claim 1 wherein said status entry further indicates the validity of data in said tile.

15. (Previously presented) The method of claim 5 wherein said status entry further indicates the validity of data in said tile.